- undesirable trends are detected in spike recoveries or RPD between duplicates
- there are unusual changes in detection limits
- deficiencies are detected by the QA personnel during internal or external audits or from the results or performance evaluation samples
- inquiries concerning data quality are received.

Corrective action procedures are often handled at the bench level by the analyst, who reviews the preparation or extraction procedure for possible errors, checks the instrument calibration, spike and calibration mixes, instrument sensitivity, and so on. If the problem persists or cannot be identified, the matter is referred to the Technical Director, Laboratory Director and/or Laboratory QA Manager for further investigation. Once resolved, full documentation of the corrective action procedure is filed with the CDM's QAO.

Precision and accuracy will be regularly tracked by the analytical staff to determine unacceptable results and to evaluate and implement corrective actions. Laboratory supervisors and QA/QC staff will evaluate analytical data against the appropriate quality control limits. Corrective actions may include, but are not limited to, recalibration of instruments using freshly prepared calibration standards; replacement of lots of solvent or other reagents that give unacceptable blank values; additional training of laboratory personnel; or reassignment, if necessary. Corrective actions in many cases may have to be defined as the need arises;

If substantial corrective action is required or if serious QA problems are encountered, CDM's QAO will be notified by the Laboratory QA Manager by phone and in writing as soon as possible. All corrective actions will be implemented and documented after notification of the CDM's QAO and the MDEQ Project Manager.

For nonconformance problems, a formal corrective action process is initiated as soon as the problem is identified. The individual who identifies the problem is responsible for initiating the documentation. The nonconformance is reported to the appropriate supervisor, who will complete and sign a nonconformance memorandum form and notify the Laboratory QA Manager. The Laboratory QA Manager is responsible for tracking the status of the nonconformance memos. Implementation of corrective action will be confirmed in writing through the same channels. Any nonconformance memo that has been written against a specific project is filed with the project file and is noted in the case narrative of the Certificate of Analysis or Data Package. Implementation or corrective action within the laboratories is focused through the Laboratory Project Managers' office.